

ANNUAL REPORT FOR 2020



**US 17-74-76 Temporary Impact Site
Brunswick and New Hanover Counties
TIP No. R-3601
CAMA permit No. 89-13**



Prepared By:
Roadside Environmental Unit and Environmental Analysis Unit
North Carolina Department of Transportation
November 2020

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SUMMARY

The US 17-74-76 temporary impact site (R-3601) is located in Brunswick and New Hanover Counties. This is an annual report for temporary impacts associated with the construction of the R-3601 US 17-74-76 from NC 133 / SR 1472 interchange to the US 421 / NC 133 interchange. The project was accepted as complete on January 16, 2017.

The temporary impacts to CAMA wetlands encompass approximately 0.06 acres of roadway impacts (0.01 temp. fill and 0.05 hand clearing in wetlands) and 0.039 acres due to hand clearing in wetlands for utility impacts. Site 10 404 temporary wetland fill area of 0.05 acres was replanted with *Scirpus robutus* and was photo monitored as well. The temporarily impacted areas are being monitored to ensure that it re-attains its pre-project wetland functions. No hydrologic monitoring is required for this site; however, vegetation monitoring is required within three years of the project completion.

After the first year of monitoring, the US 17-74-76 temporary impact site shows by visual observation that the temporarily impacted areas have re-attained their pre-project wetland functions.

NCDOT proposes to discontinue vegetation monitoring at the US 17-74-76 temporary impact site.

1.0 INTRODUCTION

1.1 Project Description

The US 17-74-76 temporary impact site (R-3601) is located in Brunswick and New Hanover Counties. This is an annual report for temporary impacts to CAMA wetlands associated with the US 17-74-76 project (Figure 1).

1.2 Purpose

In order for a temporarily impacted site to be considered successful, the site must re-attain pre-project wetland functions. This report details the vegetation monitoring in 2020 at the US 17-74-76 temporary impact site. Hydrologic monitoring was not required for this site.

1.3 Project History

January 2017	Project Accepted As Complete
October 2020	Vegetation Monitoring (Year 1)

2.0 VEGETATION: US 17-74-76 TEMPORARY IMPACT SITE (YEAR 1 MONITORING)

2.1 Success Criteria

Due to the possibility that compaction, mechanized clearing and/or other site alterations might prevent any temporary Coastal Wetland impact area from re-attaining pre-project wetland functions, the permittee shall monitor temporary wetland impacts for three years after project completion. The permittee shall schedule a meeting with DCM to verify the extent and location of temporary impacts upon project completion. The permittee shall then provide an annual update on any wetland areas temporarily impacted by this project. This annual update shall consist of photographs and written report on the progress of these temporarily impacted areas in re-attaining wetland jurisdictional status. Three years after project completion, the permittee shall schedule an agency field meeting with DCM to determine if the wetland areas temporarily impacted by this project have re-attained pre-project wetland functions. If at the end of 3 years the wetland areas temporarily impacted by this project have not re-attained pre-project wetland functions, DCM shall determine whether compensatory wetland mitigation shall be required.

2.2 Description of Species

No species were planted within the CAMA wetland temporary impacted areas. These areas were left to re-vegetate naturally. Site 10 404 temporary fill area was replanted with *Scirpus robustus*, Saltmarsh Bulrush.

2.3 Results of Vegetation Monitoring

The temporary impact areas where temporary fill and hand clearing in wetlands occurred have naturally re-vegetated with a variety of wetland species. Some of the species noted on site included cattail, marsh-elder, phragmites, *Scirpus robustus*, *baccharis*, *Scirpus* sp. and various other wetland species.

2.4 Conclusions

There were approximately 0.06 acres of temporary roadway impacts (0.01 temp. fill and 0.05 hand clearing in wetlands) and 0.039 acres due to hand clearing in wetlands for temporary utility impacts on site. Site 10 404 temporary wetland fill area of 0.05 acres was replanted with *Scirpus robustus* and was photo monitored as well. By visual observation the US 17-74-76 temporary impact site shows that natural re-vegetation is occurring and that the impacted areas are re-attaining their pre-project wetland functions.

3.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

NCDOT proposes to discontinue vegetation monitoring at the US 17-74-76 temporary impact site.

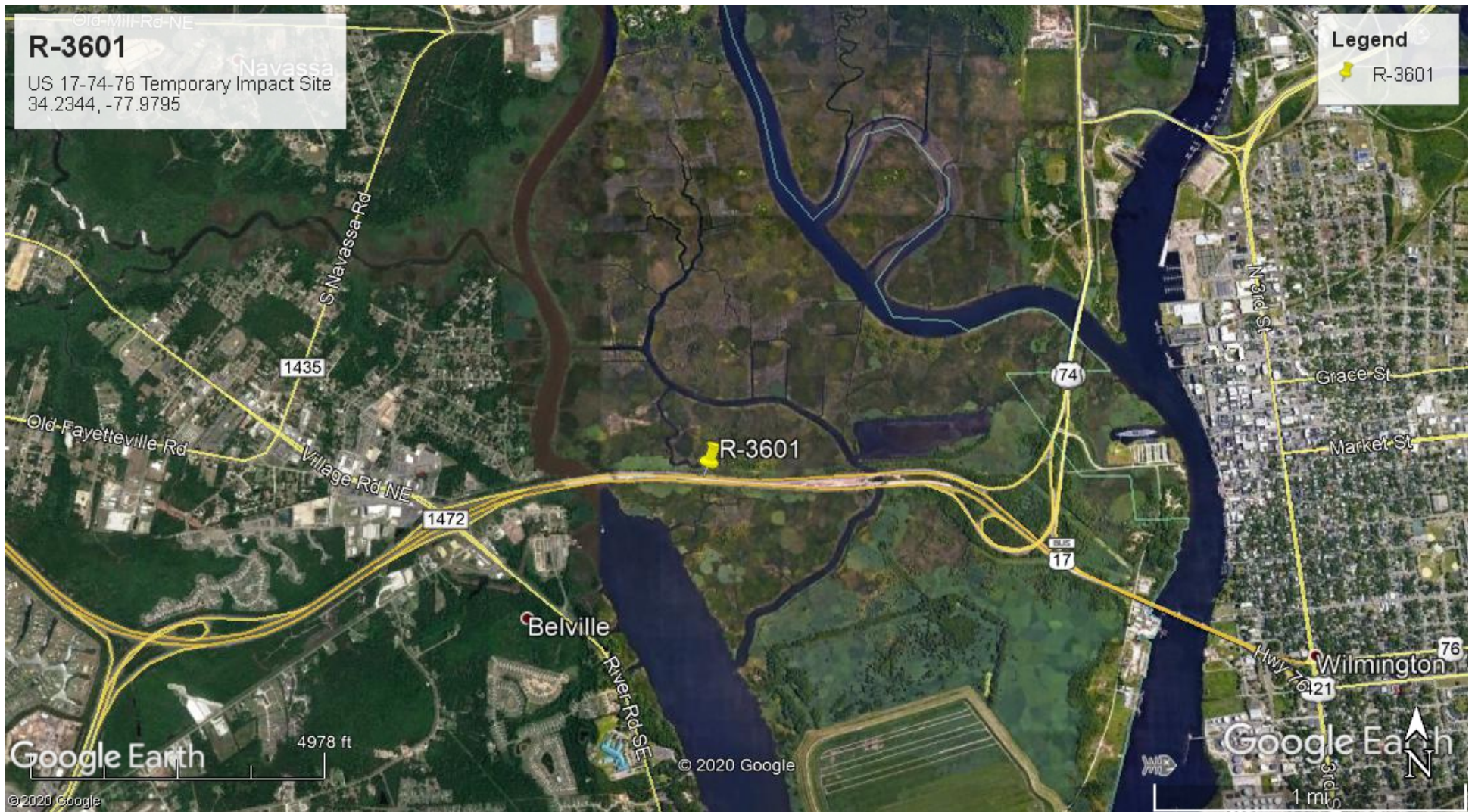


Figure1. Vicinity Map

APPENDIX A

SITE PHOTOS AND PERMIT DRAWINGS

US 17-74-76 Temporary Impact Site



Photo 1 (Site 3 Roadway)



Photo 2 (Site 3 Roadway)



Photo 3 (Site 2 Utility)



Photo 4 (Site 9 Roadway and Site 6 Utility)



Photo 5 (Site 7 Utility)



Photo 6 (Site 10 Roadway)

US 17-74-76 Temporary Impact Site

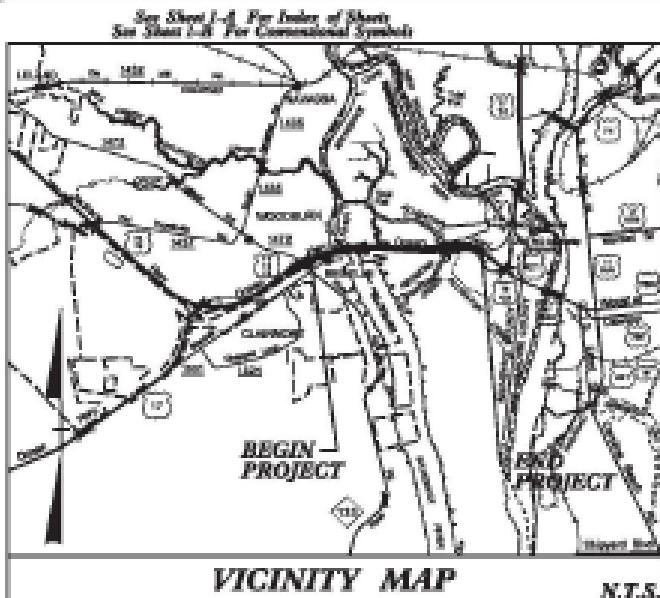


Photo 7 (Site 5 Roadway)

October 2020

CONTRACT: C 203359 TIP PROJECT: R-3601

CONTRACT: C 203359



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BRUNSWICK AND NEW HANOVER COUNTIES



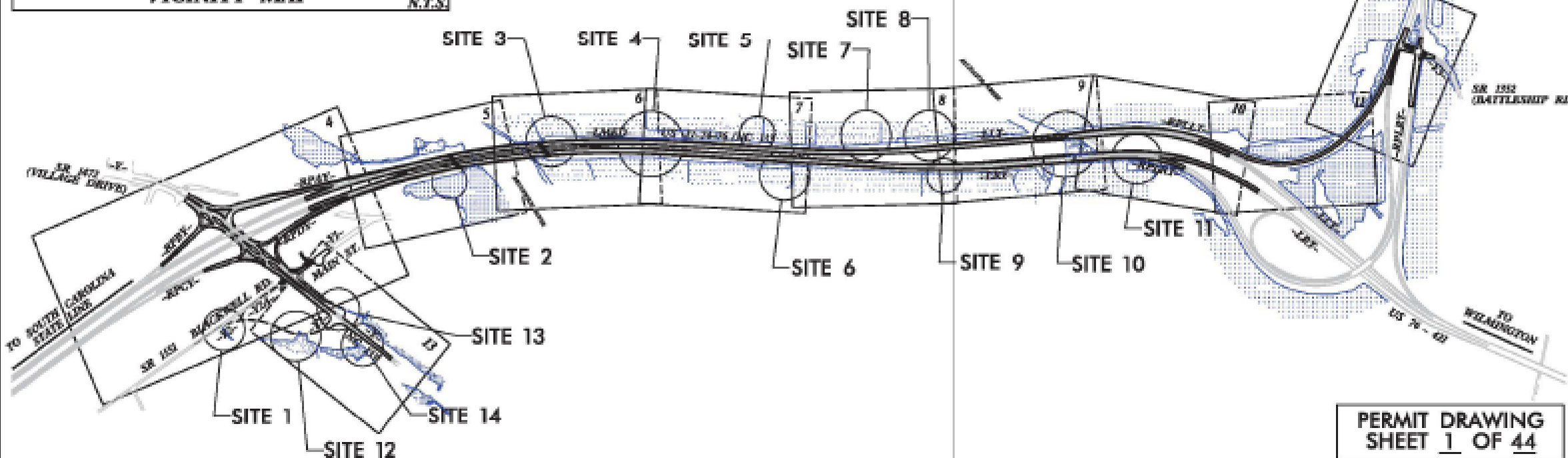
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N.C.	R-3601	1	
STATE PROJECT NUMBER	F.L.P. NUMBER	DESCRIPTION	
WB-38862.3.P52	NHS-0017186	PE	



LOCATION: US 17-74-76 FROM THE NC 133 / SR 1472 INTERCHANGE TO THE US 421/NC 133 INTERCHANGE

TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES, SIGNALS, AND SIGNING

WETLAND AND SURFACE WATER IMPACTS PERMIT



PERMIT DRAWING
SHEET 1 OF 44

- A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF LELAND AND BELVILLE.
- CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
- THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

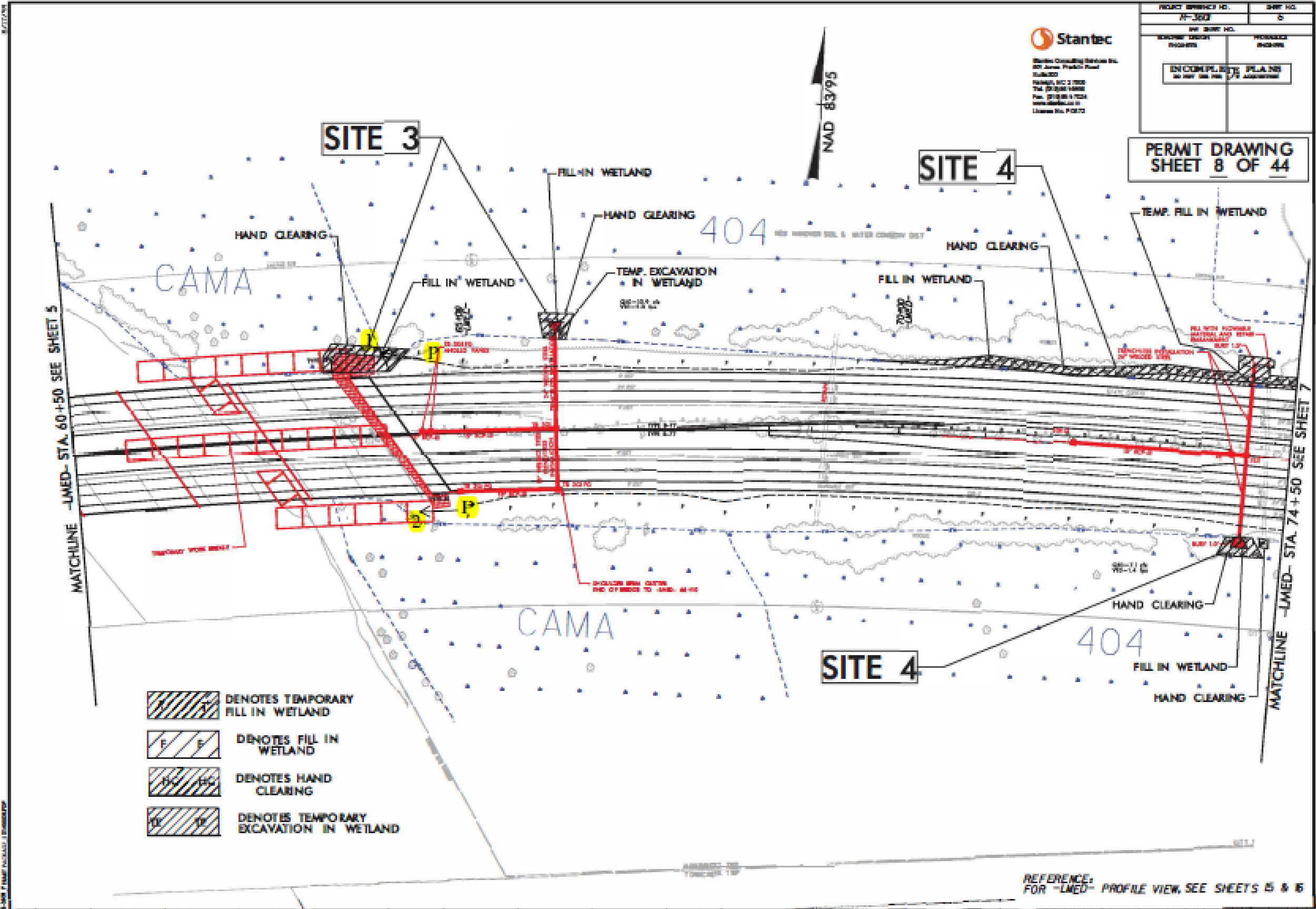
<p>GRAPHIC SCALES</p> <p>0 25 50 100 PLANS</p> <p>0 25 50 100 PROFILE (HORIZONTAL)</p> <p>0 5 10 20 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2014 = 79,625 ADT 2035 = 107,000 DHV = 11 % D = 55 % T = 6 % * V = 60 MPH * (TTST - 3%+ DUAL 3%) FUNC. CLASSIFICATION FREWAY</p>	<p>PROJECT LENGTH</p> <p>LENGTH ROADWAY TIP PROJECT R-3601 = 1.462 MI. LENGTH STRUCTURE TIP PROJECT R-3601 = 0.205 MI. TOTAL LENGTH TIP PROJECT R-3601 = 1.667 MI. NOTE: -LMD- & -LRT- USED FOR PROJECT LENGTH.</p> <p style="text-align: center;">K. ZAK HAMDI, PE PROJECT ENGINEER - DESIGN BUILD GROUP</p> <p>NCDOT CONTACT:</p>	<p>Prepared in the Office of: STANTEC CONSULTING 801 Jones Franklin Road, Suite 200 Raleigh NC 27609 Tel. (919) 852-8800 Fax. (919) 852-7804 www.stantec.com License No. P-4672</p> <p>RIGHT OF WAY DATE: APRIL 24, 2014</p> <p>LETTING DATE: DECEMBER 17, 2013</p>	<p>HYDRAULICS ENGINEER</p> <p>_____ P.E.</p> <p>ROADWAY DESIGN ENGINEER</p> <p>_____ P.E.</p>	
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PROJECT REFERENCE NO.	DRAWING NO.
17-300	8
PROJECT NAME	PROJECT NUMBER
ENCLOSURE #17	FLA 108

PERMIT DRAWING
SHEET 8 OF 44



- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES TEMPORARY EXCAVATION IN WETLAND

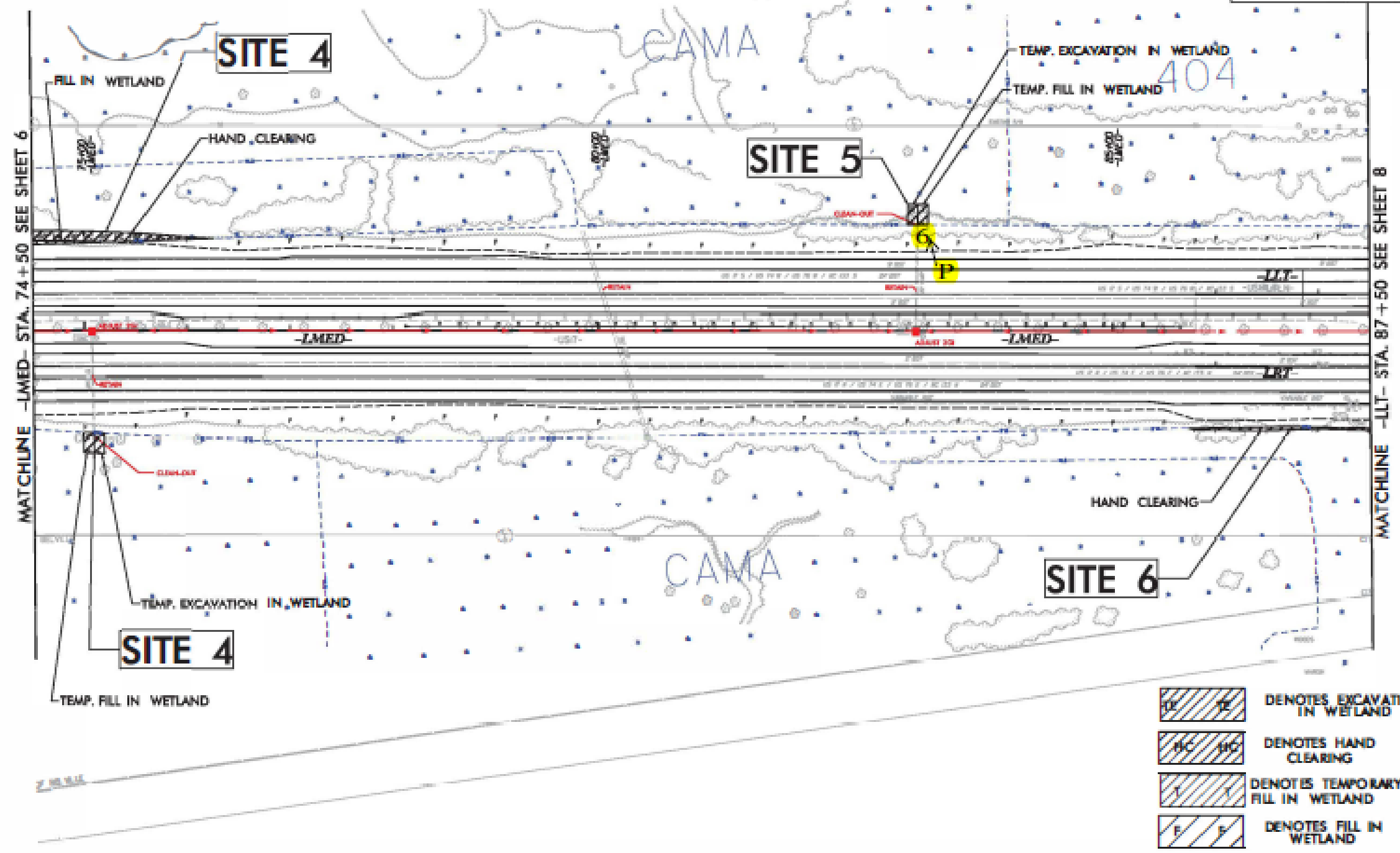
REFERENCE FOR "LMED" PROFILE VIEW, SEE SHEETS 5 & 6

PLAN
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SCALE: AS SHOWN
SHEET NO. 14 OF 44

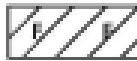





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REVISIONS	DESCRIPTION
ENCOMPRI	PLANS

PERMIT DRAWING
SHEET 14 OF 44



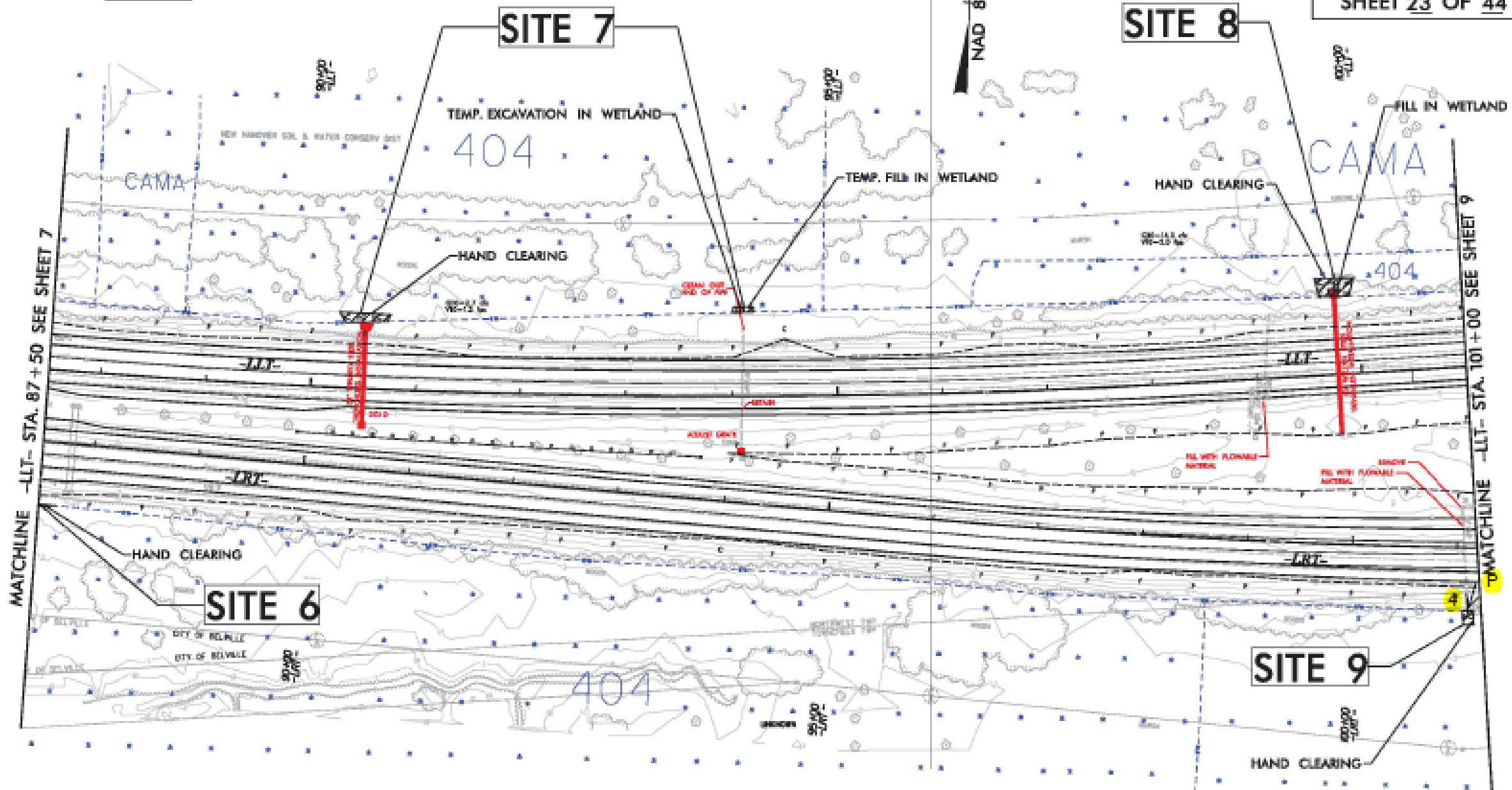
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- DENOTES HAND CLEARING
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES FILL IN WETLAND

-  DENOTES FILL IN WETLAND
-  DENOTES TEMPORARY FILL IN WETLAND
-  DENOTES HAND CLEARING
-  DENOTES TEMPORARY EXCAVATION IN WETLAND

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 License No. 7-8871

PROJECT REFERENCE NO. R-3809	SHEET NO. 8
DATE SHEET NO. 07/04/11	ISSUANCE'S REVISED
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING SHEET 23 OF 44



8/17/2015
PROJECT: CAMA
DRAWN BY: [illegible]

- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES EXCAVATION IN WETLAND
- DENOTES TEMPORARY FILL IN WETLANDS

NAD 83/95

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PROJECT REFERENCE NO.	SHEET NO.
8-150	2
DESIGNER	REVIEWER
[illegible]	[illegible]

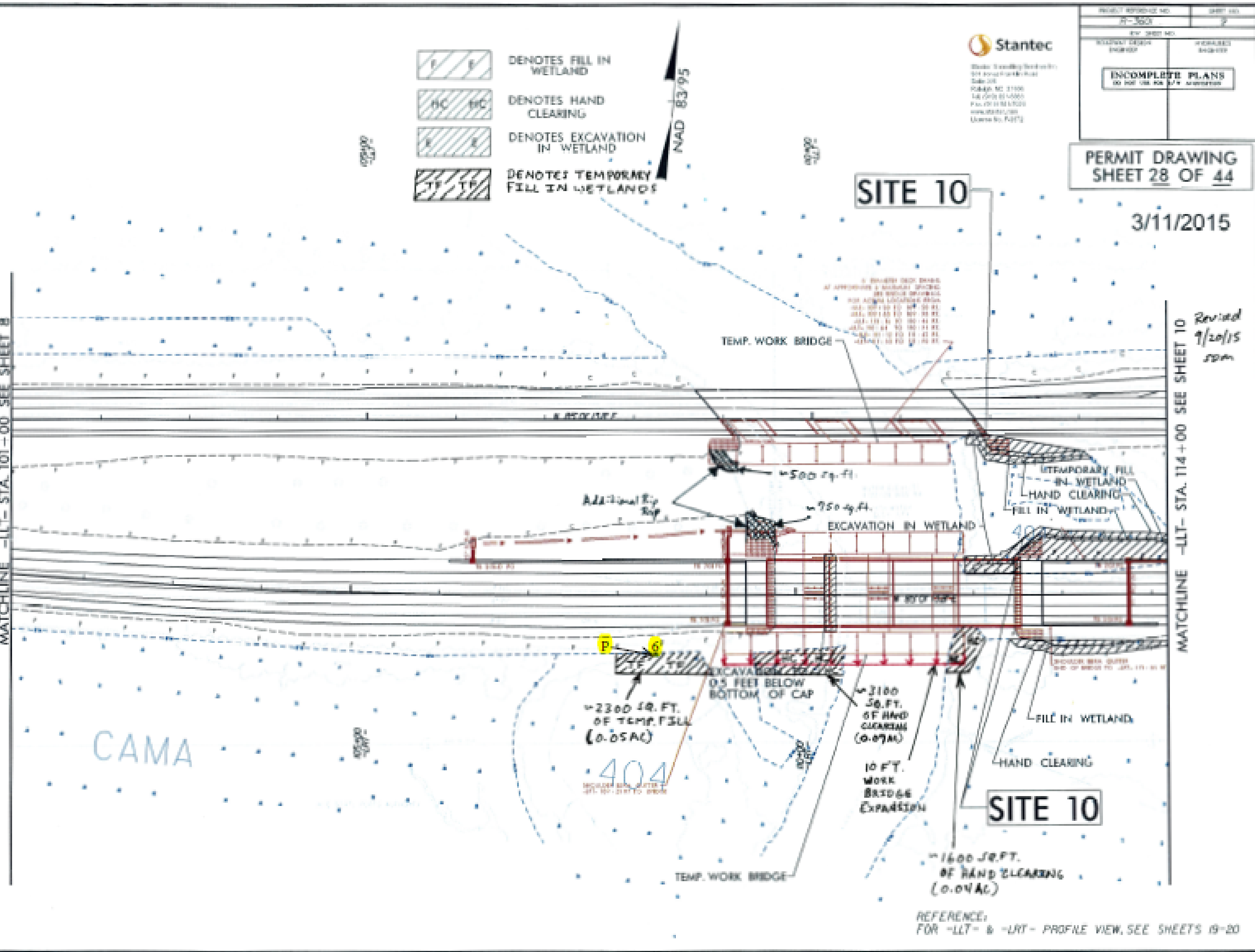
PERMIT DRAWING
SHEET 28 OF 44

3/11/2015

Revised
9/20/15
rpm

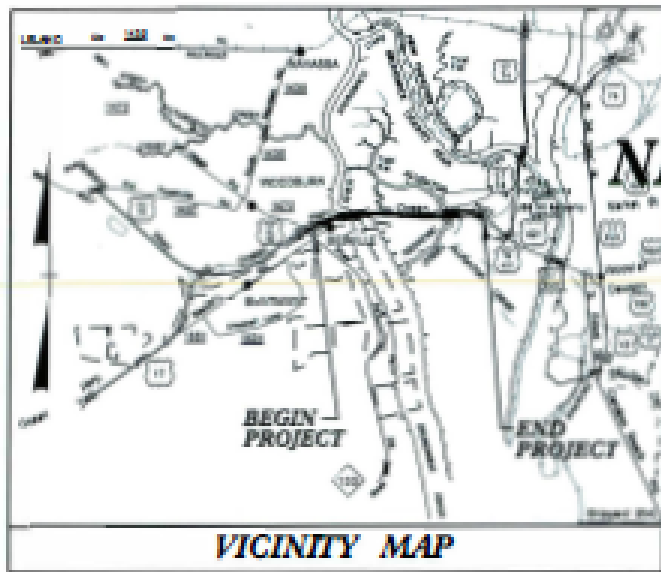
MATCHLINE -LLT- STA. 101+00 SEE SHEET 18

MATCHLINE -LLT- STA. 114+00 SEE SHEET 10



REFERENCE:
FOR -LLT- & -LRT- PROFILE VIEW, SEE SHEETS 19-20

TIP PROJECT:



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**NEU UTILITY DRAWING PLANS
BRUNSWICK AND
NEW HANOVER COUNTIES**

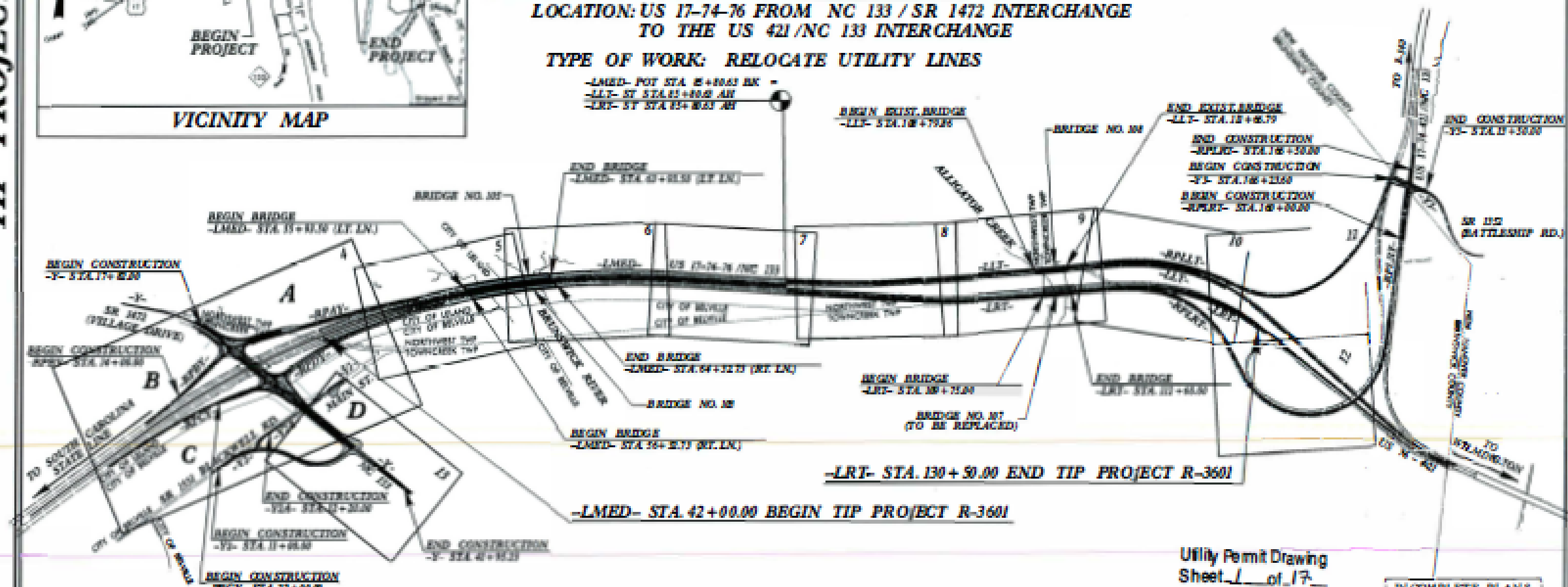
LOCATION: US 17-74-76 FROM NC 133 / SR 1472 INTERCHANGE
TO THE US 42/NC 133 INTERCHANGE

TYPE OF WORK: RELOCATE UTILITY LINES

-LAMD- POT STA 42+00.00 BK -
-LRT- ST STA 130+50.00 AH
-LRT- ST STA 134+00.00 AH

TIP NO.	SHEET NO.
R-3601	1

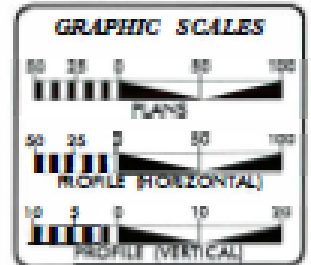
REVISED 06/10/2014



A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF LELAND AND BELVILLE.

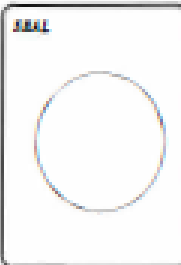
Utility Permit Drawing
Sheet 1 of 17

INCOMPLETE PLANS
PRELIMINARY PLANS



SHEET NO.	DESCRIPTION
1	TITLE SHEET
2 THRU 34	PROFILE SHEETS
4 THRU 12	UTILITY DRAWING SHEETS

- UTILITIES OWNER**
- AT&T
 - TIME WARNER CABLE (TWC)
 - BARTLINK
 - MOVC
 - PROGRESS ENERGY (DISTRIBUTION)
 - AT&C
 - BRUNSWICK REGIONAL H2O WATER AND SEWER



PREPARED BY THE OFFICE OF
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING

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Raleigh, NC 27611
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Sup. Robinson, P.E. UTILITIES SECTION ENGINEER
Cory Bequet, P.E. UTILITIES AGENT LEADER PROJECT ENGINEER
Khalil Kamil UTILITIES PROJECT ENGINEER

C:\Users\jgallagher\Documents\Projects\Rev-NEU\3601\3601.dwg

REVISED 06/10/2014

PROJECT REFERENCE NO. N-3881	SHEET NO. 7
DATE SHEET NO. 10/11/13	PROJECT ENGINEER
DESIGNER DIPON	CHECKER DIPON
INCOMPLETE PLANS DO NOT USE FOR CONSTRUCTION PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

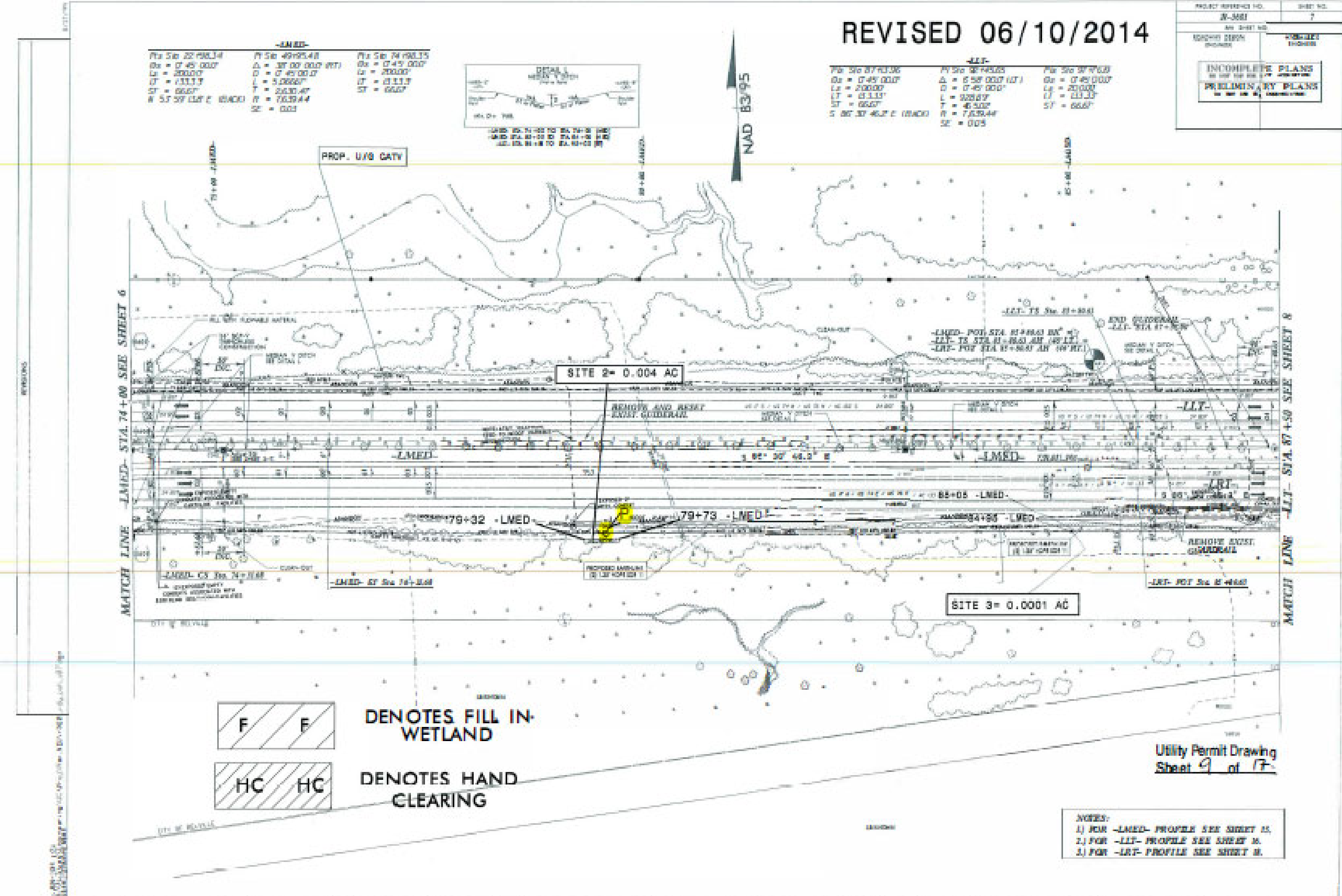
-LMED-

PI STA 22+98.14	PI STA 49+95.48	PI STA 74+98.15
Qa = 0'45"00.00"	Δ = 37'00"00.00 (RT)	Qa = 0'45"00.00"
Lc = 200.00'	L = 0'45"00.00"	Lc = 200.00'
LT = 133.33'	L = 5.00000'	LT = 133.33'
ST = 66.67'	T = 26.3047'	ST = 66.67'
N 53°39'18.7" E (SACD)	R = 76.3944'	R = 76.3944'
	SE = 0.05	



-LLT-

PI STA 87+93.36	PI STA 92+95.00	PI STA 97+96.00
Qa = 0'45"00.00"	Δ = 6°58'00.00 (LT)	Qa = 0'45"00.00"
Lc = 200.00'	L = 0'45"00.00"	Lc = 200.00'
LT = 133.33'	L = 328.87'	LT = 133.33'
ST = 66.67'	T = 45.500'	ST = 66.67'
S 86°30'46.2" E (SACD)	R = 76.3944'	R = 76.3944'
	SE = 0.05	



F F DENOTES FILL IN WETLAND

HC HC DENOTES HAND CLEARING

Utility Permit Drawing
Sheet 9 of 17

- NOTES:
- FOR -LMED- PROFILE SEE SHEET 15.
 - FOR -LLT- PROFILE SEE SHEET 16.
 - FOR -LRT- PROFILE SEE SHEET 18.

REVISIONS: [Blank] DATE: 06/10/14 BY: [Blank]

PROJECT NUMBER NO.	21-001
SHEET NO.	1
DATE	06/10/2014
DESIGNED BY	...
CHECKED BY	...
APPROVED BY	...

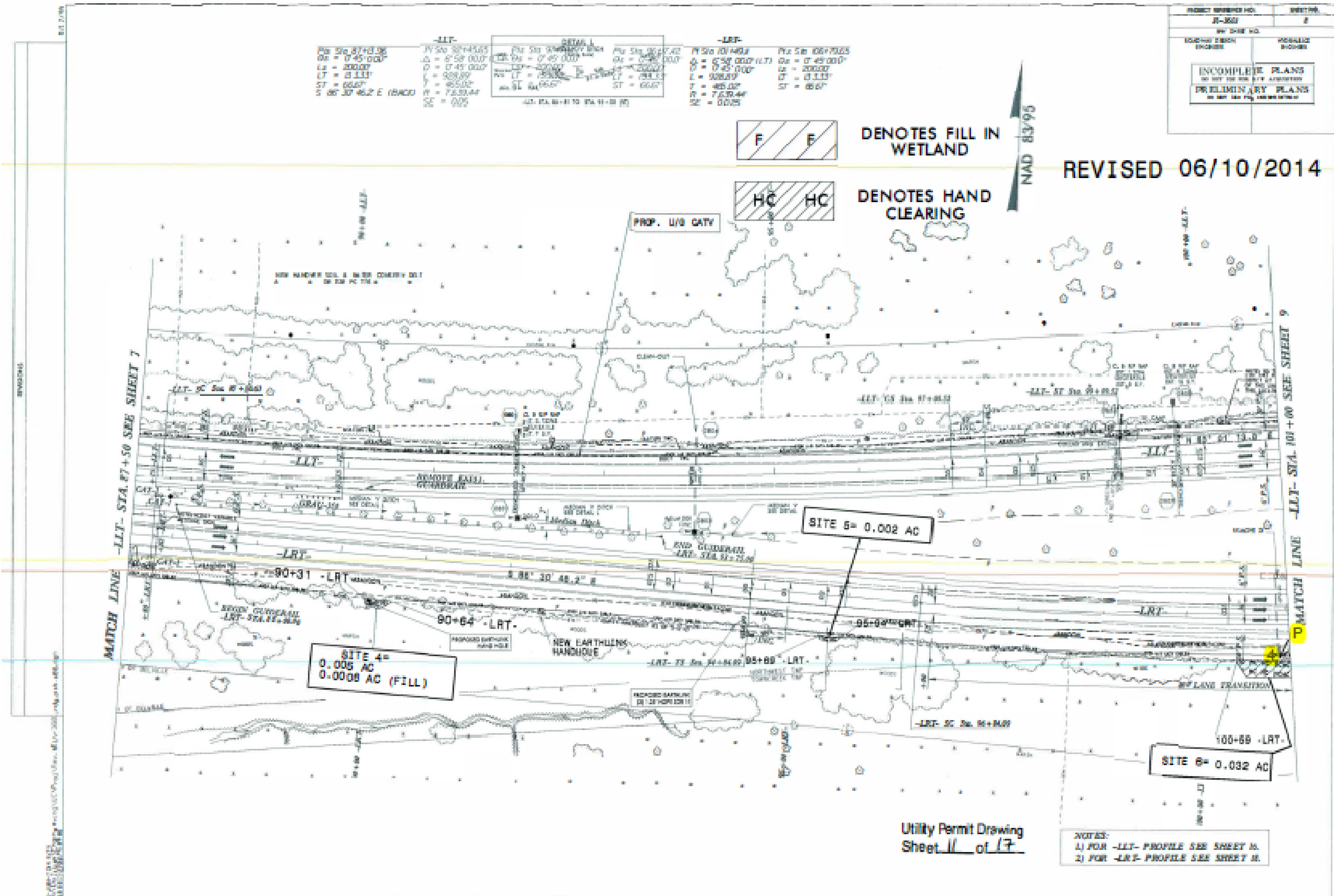
-LRT-		DETAIL 1		-LRT-	
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PT	Sta 87+45.00	PT	Sta 90+45.00	PT	Sta 95+45.00
Δ	0° 45' 00.00"	Δ	0° 45' 00.00"	Δ	0° 45' 00.00"
Δ	200.00'	Δ	200.00'	Δ	200.00'
CI	0.113'	CI	0.113'	CI	0.113'
WT	0.000'	WT	0.000'	WT	0.000'
WS	88° 30' 46.2" E (BACD)	WS	88° 30' 46.2" E (BACD)	WS	88° 30' 46.2" E (BACD)
CC	0.005	CC	0.005	CC	0.005

F F DENOTES FILL IN WETLAND

HC HC DENOTES HAND CLEARING

REVISED 06/10/2014

NAD 83/95



**SITE 4 = 0.005 AC
0.0008 AC (FILL)**

SITE 5 = 0.002 AC

SITE 6 = 0.032 AC

Utility Permit Drawing
Sheet 11 of 17

NOTES:
1) FOR -LLT- PROFILE SEE SHEET 10.
2) FOR -LRT- PROFILE SEE SHEET 11.

PROJECT NO. 21-001
 SHEET NO. 1
 DATE 06/10/2014
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

REVISED 06/10/2014

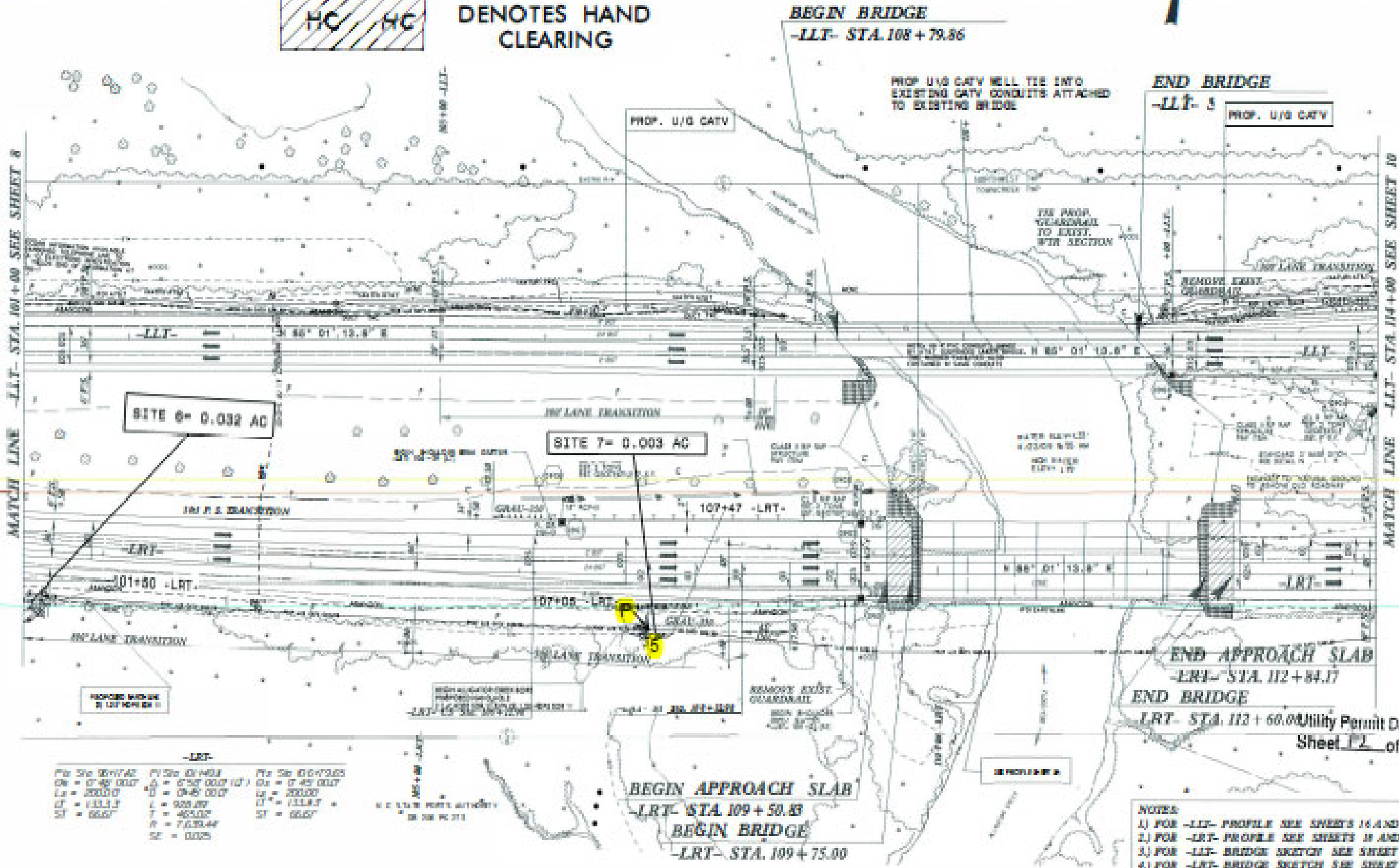
SHEET NUMBER NO.	SHEET NO.
R-108	5
DATE	
DESIGNED BY	CHECKED BY
DRAWN BY	APPROVED BY
INCOMPLETE PLANS NO SET OR FOR CITY APPROVAL PRELIMINARY PLANS NO SET OR FOR CITY APPROVAL	



DENOTES FILL IN WETLAND



DENOTES HAND CLEARING



Sta	101+00	101+50	102+00	102+50	103+00	103+50	104+00	104+50	105+00	105+50	106+00	106+50	107+00	107+50	108+00	108+50	109+00	109+50	110+00	110+50	111+00	111+50	112+00	112+50	113+00	113+50	114+00
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- NOTES:
- 1) FOR -LLT- PROFILE SEE SHEETS 16 AND 17.
 - 2) FOR -LRT- PROFILE SEE SHEETS 11 AND 12.
 - 3) FOR -LLT- BRIDGE SKETCH SEE SHEET 2-M.
 - 4) FOR -LRT- BRIDGE SKETCH SEE SHEET 2-M.